

Overview

Region

Alaska

Industry

Drainage work, site preparation and dock building

Customer Profile

Coast Range Construction, based in Homer, Alaska, specializes in setting foundations for lodges and cabins along with home-site and commercial development. Coast Range Construction has been in the construction business for 16 years and has 8 to 12 employees.

Business Situation

Located at the southernmost end of the Alaskan Highway, Homer is positioned on a hillside that ranges from sea level up to 1,400 feet. Coast Range is faced with a variety of challenges on the job including drainage issues, working in tight situations and transporting equipment on barges and ferries. Coast Range needed a flexible tool that would increase their productivity and give them an advantage over the competitors.

Solution

When Coast Range added PowerTilt to their Hitachi excavator, they increased productivity by 30 percent. They now finish their jobs in 1 to 2 days. Since PowerTilt allows Coast Range to easily work in tight spaces with surgical precision, they were able to eliminate the small dozer from the fleet and no longer bring specialty equipment to the jobsite. PowerTilt also increased the quality of their finished work by artistically cutting slopes and swales.

PowerTilt® Application Success Story

Coast Range Construction Increased Productivity by 30 Percent with the PowerTilt

"Switching to the Helac PowerTilt has increased our productivity by 30 percent and eliminated our small dozer on the jobsite. The PowerTilt is my secret weapon and has increased the quality of our finished work by artistically cutting through slopes."

- Ray Clapp, Owner, Coast Range Construction

Coast Range Construction, located in the southernmost end of the Alaskan Highway, specializes in setting foundations for lodges and cabins and house-site development. Ray Clapp, owner of Coast Range Construction for the past 16 years, was in search of a flexible attachment for his Hitachi excavator to give him the edge over his competitors.

Coast Range was faced with several challenges that they had to carefully consider when deciding which attachment to purchase. The Alaskan terrain where they work ranges from sea level up to 1,400 feet in elevation and drainage issues are common since there's very little flat ground to build on. Coast Range also needed a tool that could work in tight spaces since it's





"PowerTilt allowed us to easily work in tight spaces without moving the machine, eliminate extra equipment needed on the jobsite, and finish the work faster and with better appearance."



Ray Clapp, Owner
 Coast Range
 Construction

difficult to move a machine around the job site. They found that even moving a machine around several times could slow the project down and lose the company money. Coast Range also has to transport their equipment onto barges and ferries in the area since most of the work sites can only be reached by water.

When Coast Range discovered PowerTilt, a tilt attachment manufactured



by Helac Corporation, they immediately realized how it would help them overcome their work site challenges. Since installing PowerTilt, Coast Range has increased their productivity by 30 percent. Coast Range is now able to easily work in tight spaces without moving the machine and was able to eliminate the small dozer

from their fleet. After ten years of using PowerTilt, Coast Range has not had any maintenance issues or downtime with PowerTilt. Coast Range has the confidence that PowerTilt will go to work everyday and never breakdown.

Increased Productivity by 30 Percent

Before PowerTilt, Coast Range used their small dozer and other specialty equipment for grading, drainage projects and for cutting angles into slopes. They also had to move the machine several times during the day to get the exact angle to cut into a slope. When Coast Range started using the PowerTilt, they immediately saw an increase in productivity of 30 percent. With PowerTilt's 180 degree side to side tilt, Coast Range can wield their Hitachi with surgical precision cutting all the slopes and angles with one machine. They were able to eliminate the small dozer from their fleet and now transport less equipment to the job site.

Reduced Machines Onsite

Coast Range consistently used three machines - an excavator, track loader and small dozer – and some specialty equipment before purchasing PowerTilt to get their sloping and grading projects done. When they started using PowerTilt, they noticed they were finishing projects 1 to 2 days faster than before. The small dozer was now only being used an average of 90 hours a year and most other machines were averaging about 2,000 hours a year. Coast Range realized that the small dozer was not being used

"PowerTilt never breaks.
We've logged on 8,000
hours to our current
PowerTilt and haven't had
any maintenance issues
or downtime. I have the
confidence with PowerTilt
that it will go to work
everyday."

Ray Clapp, OwnerCoast Range Construction

enough and decided to eliminate the dozer from their fleet. With the small dozer eliminated and the PowerTilt doing almost all the work, Coast Range now saves a third of the time it use to take them with the small dozer. Also



by reducing the small dozer, Coast Range is now able to transport their equipment on barges more easily to the work site.

A Reliable and Durable Solution

One of the benefits Coast Range receives from using PowerTilt is peace of mind which comes from using

a reliable and durable attachment. Over the past 10 years, Coast Range has had no maintenance issues or downtime with PowerTilt. They put about 2,000 hours per year on their PowerTilt – it's even outlasted their machinery. Coast Range doesn't take any chances with PowerTilt – they keep on top of scheduled maintenance and when it comes to greasing, Coast Range admits they're obsessed with greasing every 8 to 10 hours. Coast Range now has up to 8,000 hours on their current PowerTilt, and it's still going strong with no maintenance issues. Coast Range is confident that PowerTilt will always finish the job in any type of weather, terrain or environment Alaska throws

their way.

Operation Technology

The PowerTilt is a simple mechanism composed of a housing and two moving parts: a central through shaft and a doughnut-shaped piston. As hydraulic pressure is applied, the piston is displaced axially, while the helical gearing on the piston OD and housing's ring gear cause the simultaneous rotation of the piston. At the same time, gearing on the piston ID and shaft cause the shaft to rotate and tilt the bucket.

Increased Appearance with a Variety of Tasks

Coast Range uses PowerTilt for a wide variety of tasks such as sloping, grading, dock building and for drainage work. They attach standard and narrow buckets or a River Teeth attachment to the PowerTilt depending on what type of project they are working on. PowerTilt easily works in tight spaces since it can be used at several different angles without having to frequently reposition the machine.

<u>Drainage Site Work:</u> Whether Coast Range is creating a drainage system for a commercial or residential site or digging out dirt for a septic system, PowerTilt always

For More Information

For more information about Helac Corporation's construction equipment attachments, call 800.797.8458. To access information using the World Wide Web, go to: www.helac.com.

creates the same quality appearance.

<u>Site Development:</u> With 180 degrees of rotation, they can easily work on cutting through slopes and swales without frequently moving the machine.

Dock Building: PowerTilt is used as a pile driver to more effectively push



the pilings of the dock down into the ground under the water at an angle.

Rock Ripping: When using a River Teeth attachment with PowerTilt, Coast Range can rip through rocks at an angle on a slope or in a ditch.

Inside Helac's Rotary Actuator Technology

PowerTilt uses Helac Corporation's innovative sliding-spline operating technology to convert linear piston motion into powerful shaft rotation. Each actuator is composed of a housing and two moving parts – the central shaft and piston. As hydraulic pressure is applied, the piston is displaced axially, while the helical gearing on the piston OD and housing's ring gear cause the simultaneous rotation of the piston. PowerTilt's end caps, seals and bearings all work in tandem to keep debris and other contaminants out of the inner workings of the actuator, prolonging product life and reducing required maintenance.

PowerTilt is available for equipment up to 75,000 lbs in eight sizes with standard rotation of up to 180 degrees. Each model is designed for a specific class of machinery and individually customized to fit the carrier.



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